

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Amend claims 1-5, as follows.

**Listing of Claims:**

1           1. (Amended) A method for performing multi-counter evaluation of  
2 a text, said method comprising computer-implemented steps of:  
3           applying to the text a finite-state machine augmented with state  
4 value lists, where each state value list indicates which counter of the multi-  
5 counter ~~scores receive~~ receives which ~~values~~ value for the ~~state, and~~  
6 state;  
7           ~~state scores are accumulated~~ accumulating the values of the states  
8 separately for each counter of the multi-counter, thereby producing a list of  
9 counter ~~scores;~~ scores; and  
10           returning the counter scores.

1           2. (Amended) A method for performing multi-counter evaluation of  
2 a text, said method comprising computer-implemented steps of:  
3           applying to the text a finite-state machine augmented with state  
4 value lists, where each state value list indicates which patterns in which  
5 counters of the multi-counter are found when the state is entered ~~and ;~~  
6           producing a list of patterns ~~is produced~~ for each counter; and  
7           returning the lists of found patterns.

1           3. (Amended) A method for constructing a multi-counter finite-  
2 state machine augmented with state value lists, said method comprising  
3 ~~the~~ computer-implemented steps of:  
4           providing by computer an empty augmented finite-state machine  
5 that has only a start state, with no transitions and no value list; and

6           ~~accumulating each by computer a~~ finite-state machine of each  
7   counter of the multi-counter that corresponds to one or more pattern-  
8   amount pairs into the augmented finite-state machine to form a merged  
9   machine, including  
10           converting state values of states of the finite-state machines of the  
11   counters of the multi-counter into state-value lists of states of the merged  
12   machine.

1           4. **(Amended)** The method of claim 3, wherein the step of  
2   accumulating a finite-state machine of each counter of the multi-counter  
3   that corresponds to one or more pattern-amount pairs into the augmented  
4   finite-state machine to form a merged machine ~~further~~ comprises the  
5   computer-implemented steps of:

6           forming states for the merged machine that correspond to pairs of  
7   states that can be reached by starting the finite-state machine of a counter  
8   of the multi-counter and the augmented finite-state machine ~~in the~~ their  
9   start states and applying the ~~machines~~ finite-state machine of the counter  
10   and the augmented finite-state machine to a text in unison, with ~~each~~ the  
11   finite-state machine of the counter and the augmented finite-state machine  
12   advancing through each text character simultaneously;

13           forming states for the merged machine that correspond to one of  
14   the finite-state machine of the counter and the augmented finite-state  
15   machine having halted while ~~the other~~ another of the finite-state machine  
16   of the counter and the augmented finite-state machine continues to  
17   advance through the text;

18           for each merged machine state, if there is a corresponding state of  
19   the augmented finite-state machine state of the counter and it has a value  
20   list, then copying the value list to form the value list for the ~~new~~ merged  
21   machine state;

22           for each merged machine state, if there is a corresponding state of  
23 the finite-state machine of the counter state, it has ~~value~~ a value, and the  
24 merged machine state has no value list, then forming a new empty value  
25 list for the merged machine state;

26           for each merged machine state, if there is ~~a~~ the corresponding state  
27 of the finite-state machine of the counter state and it has ~~value~~ a value,  
28 then adding a reference to the counter corresponding to the finite-state  
29 machine and the ~~value~~ value, to the value list for the merged machine  
30 state;

31           for each merged machine state with a corresponding first state of  
32 the augmented finite-state machine state and a corresponding second  
33 state of the finite-state machine state of the counter, for each character in  
34 transitions from both the first and the second states, forming a transition  
35 ~~for~~ from the merged machine state, with destination of the transition being  
36 a state of the merged machine state corresponding to the states of the  
37 augmented finite-state machine and the finite-state machine of the counter  
38 that are the destinations of the transitions from the first and the second  
39 states;

40           for each merged machine state with a corresponding third state of  
41 the augmented finite-state machine state and a corresponding fourth state  
42 of the finite-state machine state, of the counter, for each character in a  
43 transition from only one of the third and the fourth ~~corresponding~~ states,  
44 forming a transition ~~for~~ from the merged machine state, with destination of  
45 the transition being a state of the merged machine ~~state~~ corresponding to  
46 the state of the augmented finite-state machine or the finite-state machine  
47 of the counter that is the destination of the transition from the third or the  
48 fourth state and the machine without the transition from the third or the  
49 fourth state having halted; and

50           for each merged machine state with a corresponding fifth state of  
51 the augmented finite-state machine state or a corresponding sixth state of

52 ~~the~~ finite-state machine state of the counter but not both, for each  
53 character in a transition from the fifth or the sixth ~~corresponding~~ state,  
54 forming a transition ~~for~~ from the merged machine state, with destination of  
55 the transition being a state of the merged machine ~~state~~ corresponding to  
56 the state of the augmented finite-state machine or the finite-state machine  
57 of the counter that is the destination of the transition from the fifth or the  
58 sixth state and the machine without the transition from the fifth or the sixth  
59 state having halted.

1           5. **(Amended)** A method for adding a pattern that consists of a  
2 single sequence of characters and a corresponding pattern ~~value~~ value,  
3 from a counter to an augmented finite-state machine, said method  
4 comprising ~~the computer-implemented~~ steps of:  
5           providing ~~a pattern~~ the pattern;  
6           providing ~~a corresponding~~ the corresponding pattern value;  
7           providing ~~an~~ the augmented finite-state machine having a plurality  
8 of machine states;  
9           advancing through the machine states ~~as by~~ applying the machine  
10 to the sequence of characters as a text;  
11           if the machine would halt when applied to the sequence of  
12 characters as a text, then adding states and transitions to the machine to  
13 prevent halting; and  
14           for ~~the~~ a final state that would be reached by the machine  
15 supplemented with the added states and transitions, forming a state value  
16 list if the final state lacks ~~one~~ a state value list, and adding to the state  
17 value list a reference to the counter and the pattern value.